

9/26/13

Agenda

- Review Homework 2.1
  - p. 85-87 (10-50 evens, 64-70 evens, 80)
- Section 2.2 - Solving Two Step Equations
- Start Homework
  - p. 91-93 (12-32 evens, 38-42 evens, 66)

## Section 2.2 - Solving 2 Step Equations

Review  
Solve:

$$\begin{array}{r} x + 9 = -2 \\ -9 \quad -9 \\ \hline x = -11 \end{array}$$

$$\begin{array}{r} -2p = 18 \\ -2 \quad -2 \\ \hline p = -9 \end{array}$$

Solving 2  
Step  
Equations:

$$\begin{array}{r} 2x + 3 = 15 \\ -3 \quad -3 \\ \hline 2x = 12 \\ \frac{2x}{2} = \frac{12}{2} \end{array}$$

$$x = 6$$

$$\begin{array}{l} 2(6) + 3 = 15 \\ 12 + 3 = 15 \\ 15 = 15 \end{array}$$

Reverse Order  
of Operations:

P  
E  
M  
D  
A  
S ↑

$$\begin{array}{r} -4x - 2 = 18 \\ +2 \quad +2 \\ \hline -4x = 20 \\ \frac{-4x}{-4} = \frac{20}{-4} \end{array}$$

$$x = -5$$

$$\begin{array}{l} -4(-5) - 2 = 18 \\ 20 - 2 = 18 \\ 18 = 18 \end{array}$$

$$\begin{array}{r} 5x - 3 = -33 \\ +3 \quad +3 \\ \hline 5x = -30 \\ \frac{5x}{5} = \frac{-30}{5} \end{array}$$

$$x = -6$$

## Section 2.2 - Solving 2-Step Equations

You Try:

$$\begin{array}{r} 3x - 10 = 17 \\ +10 \quad +10 \\ \hline 3x = 27 \\ \underline{3} \quad \underline{3} \\ x = 9 \end{array}$$

$$\begin{array}{r} -3 + 5x = 12 \\ +3 \quad +3 \\ \hline 5x = 15 \\ \underline{5} \quad \underline{5} \\ x = 3 \end{array}$$

Solving with  
2 terms in a  
Numerator:

$$\begin{array}{r} -\frac{a}{4} \\ \frac{a}{4} \\ \hline -\frac{a}{4} \end{array}$$

$$\begin{array}{r} 2 - \frac{a}{4} = -1 \\ -2 \quad -2 \end{array}$$

$$-4 \left( -\frac{a}{4} \right) = (-3) \cdot (-4)$$

$$a = 12$$

You Try:

$$\begin{array}{r} -t + 8 = 5 \\ -8 \quad -8 \\ \hline -1 \cdot (-t) = (-3) \cdot (-1) \\ t = 3 \end{array}$$

## Section 2.2 - Solving 2-Step Equations

Solving with  
2 terms in a  
Numerator:

$$3\left(\frac{x-7}{3}\right) = (-12)3$$

$$\begin{array}{r} x-7 = -36 \\ +7 \quad +7 \\ \hline x = -29 \end{array}$$

$$\frac{(-29-7)}{3} = -12$$

$$\frac{-36}{3} = -12$$

$$-12 = -12$$

Summary:

With two step equations, remember to reverse the order of operations. If there are multiple terms in the numerator, get rid of the denominator first.

HW P 91-93

(12-32 Evens  
38-42 Evens  
66)